

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

REMARKS

This Amendment is responsive to the Advisory Action dated June 6, 2007, which maintained the rejections set forth in the final Office Action mailed on February 20, 2007. Applicant has added claims 30-35. Claims 1-9 and 11-35 are pending.

Declaration Under 37 C.F.R. 1.132

On November 27, 2006, Applicant timely filed a Declaration under 37 C.F.R. 1.132 after a first Office Action on the merits but before a Notice of Allowance or a Final Rejection. Applicant has not received any indication that the Examiner has considered the Declaration. Applicant respectfully requests an indication that the Declaration under 37 C.F.R. 1.132 has been considered.

Claim Rejection Under 35 U.S.C. §§ 102 and 103

In the final Office Action, claims 1-4, 7, 18-20, 23, 25, 27 and 29 were rejected under 35 U.S.C. § 102(b) as being anticipated by Cimochowski et al. (U.S. 5,967,986) or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Cimochowski in view of Tiefengraber (U.S. 5,172,110), in view of Wallerstorfer et al. (U.S. 5,478,995) or in view of Hagfors (U.S. 3,796,221). Claims 9, 11, 12, 15, 18-20, 23, 25, 28 and 29 were rejected under 35 U.S.C. § 102(e) as being anticipated by Pool et al. (U.S. 6,561,975) or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Pool in view of Tiefengraber, in view of Wallerstorfer et al. or in view of Hagfors.

Claims 5, 6, 8, 16, 21, 22, 24 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cimochowski, or, alternatively, over Cimochowski in view of Tiefengraber, Wallerstorfer or Hagfors. Claims 13, 14, 16, 17, 21, 22 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pool, or, alternatively, over Pool in view of Tiefengraber, Wallerstorfer or Hagfors.

Applicant respectfully traverses the rejection of the claims. Cimochowski and Pool, either alone or in combination with Tiefengraber, Wallerstorfer or Hagfors, fail to disclose or suggest each and every feature of the claimed invention, as required by 35 U.S.C. §§ 102(b),

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

102(e), and 103(a), and provide no teaching that would have suggested the desirability of modification to include such features.

The final Office Action stated that Applicant's arguments with respect to claims 1-9 and 11-29 regarding the Cimochowski and Pool references have been considered, but are considered moot in view of the new grounds of rejection.¹ This statement implies that the rejections of claims 1-9 and 11-29 under 35 U.S.C. §§ 102(b), 102(e), and 103(a) presented in the nonfinal Office Action mailed on August 23, 2006 have been withdrawn. However, the final Office Action presents the same rejections presented in the August 23, 2006 Office Action. In the event that the Examiner intended to reiterate the rejections presented in the August 23, 2006 Office Action, Applicant traverses the rejections and maintains all previous arguments set forth in the Amendment mailed in response to the nonfinal Office Action mailed on August 23, 2006.

Cimochowski

In support of the rejection of claims 1-8, 16, 18-27, and 29 under 35 U.S.C. §§ 102(b)/103(a) based on Cimochowski alone or Cimochowski in view of Tiefengraber, Wallerstorfer or Hagfors, the final Office Action stated that Cimochowski teaches an antenna with a ring-like structure that defines both a channel and an aperture, reasoning that an aperture is defined as an opening and a hole, gap, or slit, and a channel is defined as a course through which something can be directed or moved.² The final Office Action further asserted that the ring-like antenna structure described by Cimochowski is capable of holding a portion of clothing associated with a patient due to the fact that clothing can be placed within the opening, and in turn hold the ring-shaped antenna in a relatively fixed position relative to an implanted medical device.³ In addition, the final Office Action reasoned that because the opening of the coil can be defined as both a channel and an aperture, if the coil of the device were held vertically then rotated about its vertical axis, the channel/aperture of the device would "appear" to be much thinner than the channel/aperture of the coil that is not rotated.⁴

¹ Final Office Action at page 11, item 8.

² *Id.* at pages 2-3.

³ *Id.* at page 3.

⁴ *Id.*

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

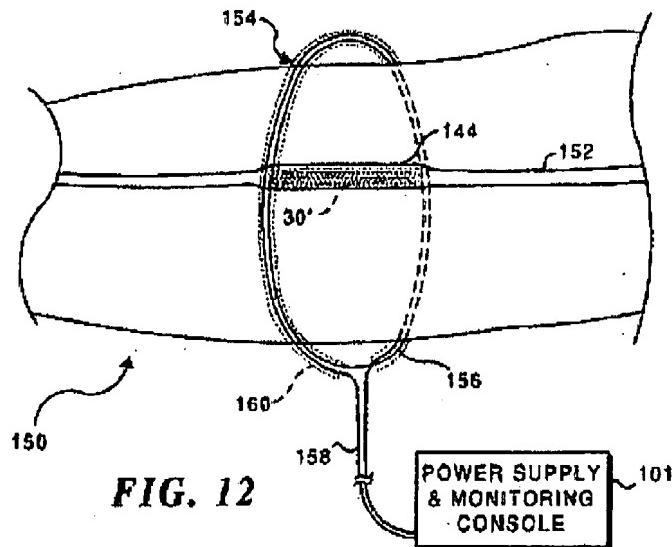
The Office Action suggested that Applicant alter the phraseology of the claims to state that the thinner channel is disposed next to, above, or beneath the wider aperture, or something of the like.⁵ In the Amendment filed on November 22, 2006, Applicant amended independent claims 1, 18, 27 and 29 to recite an antenna for a medical device programmer that defines an aperture with a wide end and a channel disposed adjacent the wide end, wherein the channel is narrower than the wide end. Claims 1, 18, 28, and 29 also state that the channel is formed to hold a portion of an item of clothing associated with a patient and thereby hold the antenna in a substantially fixed position relative to an implantable medical device. Claim 25 was amended to specify that the means for attaching an antenna head to an item of clothing included an aperture defined by the antenna head, where the aperture includes a wide end and a narrower channel adjacent to the wide end.

The Cimochowski reference fails to teach each and every feature of Applicant's independent claims 1, 9, 18, 27 and 29. For example, Cimochowski fails to teach or suggest an antenna that defines an aperture with a wide end and a channel disposed adjacent the wide end. Instead, Cimochowski describes an antenna comprising an external coil with a ring-like structure such that the antenna defines a wide, open, circular aperture capable of wrapping around relatively large portions of a patient's body.⁶ Copied below is FIG. 12 of Cimochowski, which illustrates an external coil 154 that includes a plurality of turns 156 sufficient in diameter to encompass thigh 150 of a patient.

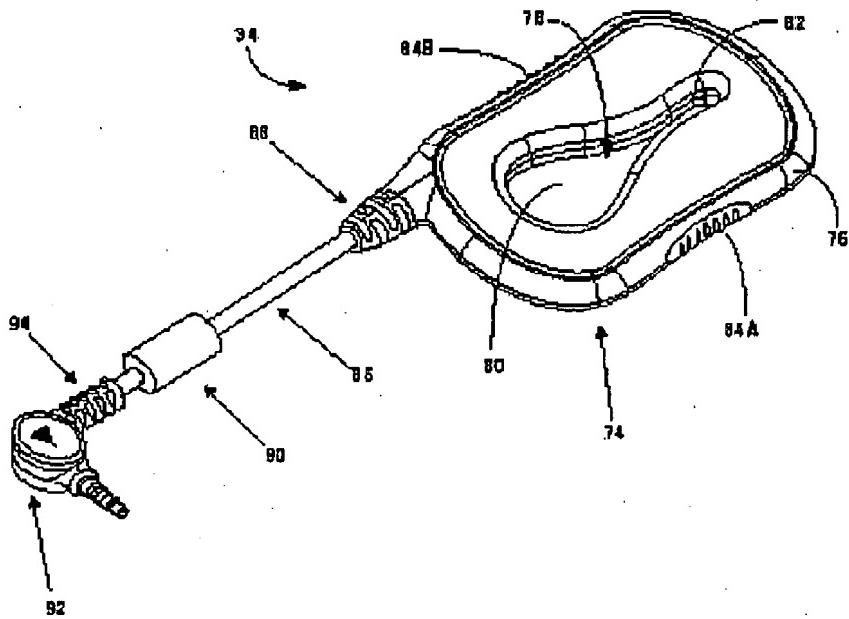
⁵ *Id.* at page 4.

⁶ Col. 16, ll. 1-9; FIG. 12.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

**FIG. 12**

The final Office Action stated that the ring-like structure of the external coil 154 defines both an aperture and a channel. Applicant respectfully disagrees. External coil 154 defines a circular aperture in no way an aperture comprising a wide end and a channel disposed adjacent the wide end. FIG. 6A of Applicant's disclosure, copied below, illustrates, external antenna 34 including a loop-like telemetry head 74 that defines an aperture 78 with a wide end 80 and a narrow, tapered end 82 adjacent to the wide end 80.

**Fig. 6A**

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

Clearly, a ring-like structure 154 that defines a circular aperture, as shown above in FIG. 12 of Cimochowski, cannot define an aperture that includes both a wide end and a channel that is narrower than the wide end disposed adjacent to each other, as shown in Applicant's FIG. 6A.

Cimochowski also fails to describe an antenna with a channel that is capable of holding a portion of an item of clothing associated with a patient and thereby holding the antenna in a substantially fixed position relative to an implantable medical device. Cimochowski fails to even mention attaching the antenna to an item of clothing of the patient. Instead, Cimochowski describes a stent implanted within an artery within a thigh of a patient that includes an RF antenna, and an external coil antenna that includes a plurality of turns sufficient in diameter to encompass the thigh of a patient.⁷ Cimochowski further states that the external coil antenna can be made sufficiently large to encompass the portion of the body in which the implanted stent is disposed, such as the torso, another limb of the patient, or the neck of the patient.⁸ Cimochowski describes an antenna having a wide, open aperture capable of wrapping around relatively large portions of a patient's body, and makes no mention of any structure resembling a channel that is formed to hold a portion of clothing of a patient in order to position the antenna relative to an implantable medical device within the patient.

For the same reasons described above with respect to independent claims, Cimochowski fails to teach each and every element of Applicant's claim 25. The external coil antenna taught by Cimochowski is not an antenna for a medical device programmer comprising an antenna head, and means for attaching the antenna head to an item of clothing associated with a patient, where the means comprises a wide end and a channel that is disposed adjacent the wide end, is narrower than the wide end and is formed to hold the portion of the item of clothing, as recited by Applicant's claim 25.

In apparent recognition of the failure of Cimochowski to teach or suggest an antenna that defines an aperture comprising a wide end and a channel adjacent the wide end, where the channel is narrower than the wide end, as recited by Applicant's independent claims 1, 18, 25, 27, and 29, the final Office Action cited Tiefengraber, Wallerstorfer, and Hagfors as teaching these elements of Applicant's independent claims. However, Tiefengraber, Wallerstorfer, and Hagfors

⁷ Col. 16, ll. 1-9.

⁸ Col. 16, ll. 13-16.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

each fail to teach or suggest an antenna that defines an aperture (or a means for attaching an antenna head to an item of clothing) comprising a wide end and a channel adjacent the wide end and formed to hold a portion of an item of clothing associated with a patient, where the channel is narrower than the wide end.

The Office Action found that FIG. 1 and column 3, lines 5-15 of Tiefengraber teach an antenna tag that includes an aperture comprising a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing and hold the antenna in a substantially fixed position.⁹ However, FIG. 1 of Tiefengraber merely illustrates a circular hole 15 for fastening an indicator/ski pass combination to clothing of a skier. Again, a hole that defines a circular aperture cannot define an aperture that includes both a wide end and a channel that is narrower than the wide end disposed adjacent to each other, as required by Applicant's independent claims. Moreover, the antenna 7 described in Tiefengraber in no way defines the circular hole 15. Tiefengraber does not teach or suggest any other aperture configurations for fastening an indicator/ski pass combination to clothing of a skier.

In addition, Tiefengraber does not teach that the circular hole 15 shown in FIG. 1 is formed to hold a portion of an item of clothing. Applicant's claims require an antenna defining an aperture comprising a wide end and a channel adjacent the wide end, where the channel is narrower than the wide end. In addition, claim 1, for example, specifically recites that the channel is formed to hold a portion of an item of clothing. Tiefengraber merely states in passing that the circular hole 15 shown in FIG. 1 can be used to fasten the ski pass/indicator device to clothing of a skier. Tiefengraber does not state that clothing is received in the circular hole 15. In fact, Tiefengraber offers no further details as to how the circular hole 15 can be used to fasten the indicator device to clothing. It seems clear, however, that circular hole 15 merely designates a hole in the ski pass that must receive a wire or some other fastening mechanism that fastens to clothing, e.g., via a loop or zipper hole as in the case of many conventional ski passes. Applicant cannot imagine how hole 15, as a tiny circular hole in the ski pass, could directly receive and securely retain any item of clothing.

⁹ Final Office Action at page 3.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

As Applicant's disclosure provides, when clothing is received in the channel of the antenna, friction holds the antenna and clothing in place relative to each other.¹⁰ Given the context of the Tiefengrabber device, i.e., to locate a buried skier, it appears unlikely to Applicant that Tiefengrabber would teach an antenna that is held to clothing of a person via friction. A more secure attachment mechanism, such as a hole 15 that interlocks with a loop of a zipper, would be more likely in the case of attaching a device to an active skier. The Tiefengrabber device is intended to remain with the skier, even when buried in snow.¹¹ A hole 15 as small as the hole in the ski pass shown in FIG. 1 of Tiefengrabber would unlikely provide sufficient frictional forces to securely hold the locator device to a skier while the person is skiing or during the likely turmoil that ensues when a skier is a victim of an avalanche.

Applicant also notes that the Office Action appears to be relying on an improper finding of an inherent disclosure in Tiefengrabber. The fact that a certain characteristic may be present in the prior art is not sufficient to establish the inherency of that result or characteristic.¹² The Office Action must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.¹³ The Office Action does not provide any reasonable support for the determination that the aperture taught by Tiefengrabber necessarily includes an aperture comprising a channel formed to hold a portion of an item of clothing associated with a patient.

As another example of the deficiencies in the Tiefengrabber reference, Tiefengrabber does not teach that the circular hole 15 shown in FIG. 1 is defined by an antenna, as set forth in Applicant's claims. While Tiefengrabber discloses an antenna 7, the antenna is formed as a wire loop that extends around an edge of the indicator and ski pass device.¹⁴ As FIG. 1 of Tiefengrabber shows, the antenna 7 completely bypasses hole 15 in the ski pass 2 and does not define the hole 15, as required by Applicant's independent claims. Furthermore, the antenna 7 is not for a medical device programmer, as further required by Applicant's independent claims.

¹⁰ Applicant's disclosure at paragraph [0095].

¹¹ See, e.g., Tiefengrabber at col. 2, ll. 12-15 and ll. 29-35.

¹² *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPO.2d 1955, 1957 (Fed. Cir. 1993); MPEP § 2112.

¹³ *Ex parte Levy*, 17 USPO.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original); MPEP § 2112.

¹⁴ Tiefengrabber at FIG. 1; col. 2, ll. 65-68.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

The fact that Tiefengraber teaches an indicator device that includes a hole 15 "which can be used . . . to fasten the indicator 1/ski pass 2 combination to the clothing of the skier"¹⁵ does not in any way render Applicant's claims obvious. Applicant's independent claims are not intended to claim all apertures that are formed to couple in some way to clothing. Instead, Applicant's independent claims clearly recite an antenna for a medical device, where the antenna defines an aperture comprising a wide end and a channel adjacent the wide end, and where the channel is formed to hold a portion of an item of clothing. The antenna 7 in Tiefengraber does not define hole 15 and, moreover, appears to bypass the region of the skip pass 2 adjacent hole 15. Tiefengraber, alone or in combination with Cimochowski fails to teach or suggest such an antenna.

Hagfors also fails to teach an antenna that includes an aperture comprising a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing and hold the antenna in a substantially fixed position. The final Office Action found that Hagfors "shows an antenna . . . that comprises a wide end and a narrower channel adjacent . . ."¹⁶ Applicant respectfully disagrees with the Office Action's analysis of Hagfors. The Office Action offered no support for the assertion that Hagfors teaches an antenna including a wide end and a narrower channel. The only figures in Hagfors that illustrate an antenna are FIGS. 1 and 3, which each show a circular, ring-shaped antenna 32. Again, a circular, ring-shaped aperture cannot define an aperture that includes both a wide end and a channel that is narrower than the wide end disposed adjacent to each other, as required by Applicant's independent claims. Hagfors does not teach or suggest any other aperture configurations for fastening an antenna.

In addition to failing to disclose an antenna defining an aperture comprising a wide end and a channel adjacent the wide end, Hagfors does not teach that its antenna is formed to hold a portion of an item of clothing in an aperture or any other means for attaching an antenna head to clothing defined by an antenna, as required by Applicant's independent claims. In fact, Hagfors appears to teach away from an antenna that is configured to hold a portion of an item of clothing. Hagfors provides that, "in use, the transmitter antenna coil 32 is placed on the skin directly over

¹⁵ Col. 3, ll. 11-15.

¹⁶ Final Office Action at page 3.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

the receiver 12 such that pulses of radio frequency energy are inductively coupled through the skin . . .¹⁷

With respect to the Wallerstorfer reference, the final Office Action found that FIG. 10 of Wallerstorfer, or alternatively, any of the fastening mechanisms in FIGS. 3, 6, 11, and 21, teach an antenna tag that includes an aperture comprising a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing and hold the antenna in a substantially fixed position.¹⁸ While at first glance, FIG. 10 of Wallerstorfer may appear to illustrate an aperture comprising a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing, a closer look at Wallerstorfer indicates that Wallerstorfer, among other things, fails to disclose either an antenna that defines an aperture comprising the wide end and an adjacent channel, or an aperture that is formed to hold a portion of an item of clothing associated with a patient and thereby hold the antenna in a substantially fixed position relative to an implantable medical device.

Wallerstorfer merely describes fastening mechanisms for tags, where the tags could include an antenna. Wallerstorfer does not contemplate integration of the fastening mechanism with an antenna itself. In contrast, Applicant's independent claims recite an antenna with specific structure integrally formed with it to permit the antenna to hold an item of clothing and, thus, hold the antenna in a substantially fixed position relative to an implantable medical device. Applicant's independent claims do not recite an antenna and a separate fastener, as shown by Wallerstorfer. Moreover, Applicant does not necessarily agree that the fastening element 30 shown in FIG. 10 of Wallerstorfer illustrates an aperture comprising a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing and hold an antenna in a substantially fixed position.

Wallerstorfer illustrates a fastening element 30 with a latch that enables the fastening element to be opened¹⁹, rather than an antenna defining an aperture. Again, Applicant's independent claims are not intended to claim all apertures including a wide end and a narrower channel adjacent to the wide end. Applicant's independent claims specifically recite an antenna defining such an aperture. To clarify this point even further, Applicant has added dependent

¹⁷ Col. 4, ll. 19-23.

¹⁸ Final Office Action at page 3.

¹⁹ Col. 5, l. 58 – col. 6, l. 6; *see also* FIG. 16.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

claim 30, which depends from claim 1 and specifies that the antenna includes a housing defining the aperture comprising the wide end and the channel adjacent the wide end, an antenna loop disposed within the body, and a cable configured to couple the antenna to a medical device programmer. New dependent claim 31 depends from claim 30 and specifies that the antenna loop is substantially oval in shape. Claim 32, which depends from claim 30 specifies that the housing of the antenna is formed at least in part from plastic that is molded to define the aperture. Support for new claims 30-32, as well as claims 33-35 can be found throughout Applicant's disclosure, such as at paragraphs [0094] to [0097]. Nothing in Wallerstorfer discloses an antenna defining such an aperture. Wallerstorfer does not even disclose an antenna that includes structure integrally formed therewith to permit the antenna to hold an item of clothing.

The alternative figures of Wallerstorfer relied on by the Examiner as illustrating an antenna defining an aperture (FIGS. 3, 6, 11, and 21) also fail to show an antenna defining an aperture comprising a wide end and a narrower channel. FIGS. 3, 6, 11, and 21 each illustrate a circular aperture. As Applicant has previously stated, a circular aperture cannot define an aperture that includes both a wide end and a narrower channel disposed adjacent to each other, as required by Applicant's independent claims. Wallerstorfer does not teach or even suggest that the circular apertures are defined by an antenna. In fact, with respect to the fastening ring shown in FIG. 21, Wallerstorfer states that the fastening ring consists of plastic, and fails to mention that fastening ring may be an antenna.²⁰ Accordingly, Wallerstorfer shows only a fastener and does not show an antenna defining an aperture including a wide end and an adjacent, narrower channel, as recited by Applicant's independent claims 1, 9, 18, 25, and 27-29.

It is also unclear why one skilled in the art would have even looked to Wallerstorfer or Tiefengraber to modify the external coil of Cimochowski to include define an aperture including a wide end and a narrower channel disposed adjacent to each other. Tiefengraber and Wallerstorfer do not even teach or suggest an antenna for a medical device programmer, as required by Applicant's independent claims.

To establish obviousness, the Examiner must identify an apparent reason why one of ordinary skill in the art would have been motivated to make a modification or combination to

²⁰ Col. 7, l. 36.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

arrive at the claimed invention.²¹ An invention composed of several elements is not proved obvious merely by demonstrating that each of the elements was independently known.²² While the final Office Action vaguely refers to Tiefengraber and Wallerstorfer as being in the "same problem solving area"²³ as Applicant's invention, it is unclear on what reasoning the Examiner bases the "same problem solving" assertion or what the "problem solving area" encompasses. The Examiner's analysis of a reason to combine known elements must be more specific reasoning.²⁴

If the final Office Action is implying that Tiefengraber and Wallerstorfer are in the same problem solving area as Applicant's claimed invention, Applicant respectfully disagrees. Applicant's invention is directed toward an antenna that permits relative stable positioning of the antenna relative to an implanted medical device.²⁵ On the other hand, Tiefengraber is directed toward an indicator apparatus for recovery of skiers buried by avalanches²⁶ and Wallerstorfer is directed toward a data carrier structure, such as for entry tickets.²⁷ It is unclear how Tiefengraber and Wallerstorfer are in the "same problem solving area" as Applicant's claimed invention.

If the final Office Action is implying that Tiefengraber and Wallerstorfer are in the same problem solving area as Cimochowski, Applicant respectfully disagrees. The teachings of Cimochowski that the Examiner found relevant to Applicant's invention relate to an external coil that may be coupled to a radio frequency antenna via by encompassing a portion of a body near an implanted stent.²⁸ It is unclear how the indicator apparatus of Tiefengraber and the data carrier structure of Wallerstorfer solve any problem similar to the problem addressed by Cimochowski.

It is also unclear why one of ordinary skill in the art would have been motivated to make a modification to Cimochowski based on Wallerstorfer or Tiefengraber, or a combination to arrive at the claimed invention. The fact that Tiefengraber may teach a ring to fasten the indicator apparatus to clothing of a skier or that Wallerstorfer may disclose a fastening element

²¹ *KSR Int'l Co. v. Teleflex, Inc.*, No. 04-1350, Slip op. at 14. (April 30, 2007).

²² *Id.* at 14.

²³ Final Office Action at page 3.

²⁴ *KSR*, Slip op. at 14.

²⁵ Applicant's disclosure at paragraph [0096].

²⁶ Abstract.

²⁷ Col. 3, ll. 64-67.

²⁸ Office Action at pages 2-3.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

for fixing a data carrier structure to clothing of a holder does not provide a motivation to combine the specific teachings of Tiefengraber and Wallerstorfer with Cimochowski. As described above, however, even if Cimochowski was combined with either Tiefengraber or Wallerstorfer (or Hagfors), the combination would not result in an antenna defining an aperture comprising a wide end and an adjacent, narrower channel. Nothing in Tiefengraber or Wallerstorfer even relate to a configuration of an antenna that defines an aperture, much less relate to antennas for medical devices. On the contrary, these references described fasteners without any mention of integrating such fasteners with an antenna.

For at least these reasons, the Examiner has failed to establish a prima facie case for non-patentability of Applicant's claims 1-8, 16, 18-27, and 29 under 35 U.S.C. § 102(b)/103(a) based on Cimochowski alone or Cimochowski in view of Tiefengraber, in view of Wallerstorfer et al. or in view of Hagfors. Withdrawal of this rejection is requested.

Pool

In support of the rejection of claims 9, 11-23, 25, 26, 28, and 29 under 35 U.S.C. §§ 102(b)/103(a) based on Pool alone or Pool in view of Tiefengraber, Wallerstorfer et al. or Hagfors, the final Office Action stated that Pool teaches an antenna housed within a belt, and that such a housing inherently possesses the ability to have clothing pulled through the channel created by buckling the belt, thereby holding the antenna in a substantially fixed position relative to the implanted device.²⁹ In addition, the Office Action stated that because the opening of the belt-like housing of the antenna can be defined as both a channel and an aperture, if the belt-like housing of the device were held vertically then rotated about its vertical axis, the channel/aperture of the device would appear to be much thinner than the channel/aperture of the coil that is not rotated.³⁰

Pool fails to teach or suggest positioning an antenna that defines an aperture with a wide end and a channel disposed adjacent the wide end relative to an implantable medical device. Instead, Pool describes a wearable telemetry arrangement for communicating with an implantable medical device, where the telemetry arrangement includes an article to be physically coupled to

²⁹ Final Office Action at page 5.

³⁰ *Id.* at pages 5-6.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

and donned on a body and an antenna member located on the article.³¹ For example, Pool describes the wearable article as a buckled belt, such that the antenna has a wide, open aperture capable of wrapping around a patient's waist.³² The Office Action stated that the belt-like housing of the antenna defines both an aperture and a channel. However, an antenna that defines a circular aperture cannot define an aperture that includes both a wide end and a narrower channel disposed adjacent to each other.

The Pool reference does not describe pulling a portion of an item of clothing into a channel defined by the antenna to hold the antenna relative to an implantable medical device. Contrary to the assertion by the Office Action, buckling a belt in which the antenna described by Pool is disposed does not create a channel into which to pull a portion of an item of clothing to hold the antenna relative to the implantable medical device. Pool teaches an antenna being included in a wearable article with the ability to hold the antenna relative to the implantable medical device when a patient wears the article in which the antenna is disposed. Therefore, the antenna within the belt, as described by Pool, is positioned relative to an implantable medical device by buckling the belt around the patient's waist, not by pulling an item of clothing through the buckled belt, much less pulling clothing through an antenna that defines an aperture with a wide end and a channel disposed adjacent the wide end, as claimed. The interpretations of both the features of claims 9, 18, 28 and 29 and the Pool reference by the final Office Action are unreasonably broad.

The final Office Action cited Tiefengraber, Wallerstorfer, and Hagfors as teaching "antenna tags wherein an aperture comprises a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing and hold the antenna in a substantially fixed position."³³ However, as established above, neither Tiefengraber, Wallerstorfer, nor Hagfors teaches or suggests an antenna that defines an aperture comprising a wide end and a channel adjacent the wide end, where the channel is narrower than the wide end. Accordingly, even if Pool were combined with Tiefengraber, Wallerstorfer or Hagfors, Applicant's claims would not be rendered obvious. For example, none of the cited references teaches a method that comprises pulling at least some of a portion of an item of clothing into a channel in an antenna to thereby

³¹ Abstract.

³² See col. 8, ll. 35-38.

³³ Final Office Action at page 7.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

hold the antenna in a substantially fixed position relative to an implanted medical device, as recited by Applicant's independent claims 9 and 28.

For similar reasons discussed above with respect to the lack of motivation to combine Cimochowski with Tiefengraber and Wallerstorfer, it is unclear why one skilled in the art would have combined the teachings of Tiefengraber and Wallerstorfer with Pool. Pool relates to a wearable telemetry arrangement for use with a medical information communications device³⁴, whereas Tiefengraber relates to an indicator apparatus for recovery of skiers buried by avalanches³⁵ and Wallerstorfer is directed toward a data carrier structure.³⁶ The fact that Tiefengraber may teach a ring to fasten the indicator apparatus to clothing of a skier or that Wallerstorfer may disclose a fastening element for fixing a data carrier structure to clothing of a holder does not provide a motivation to combine the specific teachings of Tiefengraber and Wallerstorfer with Pool in order to arrive at an antenna that defines an aperture comprising a wide end and an adjacent, narrower channel formed to hold a portion of an item of clothing.

It is impermissible for the Office Action to establish obviousness by demonstrating that each of the elements was independently known.³⁷ Other than the vague reference to the "same problems solving area," the Office Action has not identified an apparent reason why one of ordinary skill in the art would have been motivated to make a modification to Pool or to combine Pool with Tiefengraber and Wallerstorfer in order to arrive at Applicant's claimed invention.³⁸ Even if Pool was combined with either Tiefengraber or Wallerstorfer (or Hagfors), the combination of references does not teach an antenna defining an aperture comprising a wide end and an adjacent, narrower channel.

Pool alone or in combination with Tiefengraber, Wallerstorfer or Hagfors fails to disclose each and every limitation set forth in claims 9, 11-23, 25, 26, 28, and 29. For at least these reasons, the Office Action has failed to establish a prima facie case for unpatentability of Applicant's claims 9, 11-23, 25, 26, 28, and 29 under 35 U.S.C. §§ 102(b) and 103(a). Withdrawal of this rejection is requested.

³⁴ Abstract.

³⁵ Abstract.

³⁶ Col. 3, ll. 64-67.

³⁷ *Id.* at 14.

³⁸ KSR, Slip op. at 14.

Application Number 10/693,001
Response to Office Action mailed August 23, 2006

New Claims

Applicant has added claims 30-35 to the pending application. The applied references fail to disclose or suggest the inventions defined by Applicant's new claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed inventions. As an example, the cited references fail to disclose or suggest an antenna for a medical device programmer, where the antenna comprises a housing defining an aperture comprising a wide end and a channel adjacent the wide end, wherein the channel is narrower than the wide end and is formed to hold a portion of an item of clothing associated with a patient and thereby hold the antenna in a substantially fixed position relative to an implantable medical device, an antenna loop disposed within the housing, and a cable configured to couple the antenna to the medical device programmer, as recited by Applicant's claim 30.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

7/20/07

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